



Car Stereo Receiver and Audio Player

USER MANUAL AND INSTALLATION INSTRUCTIONS



Model: RUSX123

Main Function:

- AM/FM-MPX Electronic Tuning Radio
- Frequency Range: AM 530 – 1710 kHz; FM 87.5 – 107.9 MHz
- Radio Station Preset: 18 FM / 12 AM
- Detachable Front Panel
- Front USB Port and SD Card Slot
- Prepositive AUX Input
- Electronic Volume/Bass/Treble/Balance/Fade Control
- Preset EQ (POP, CLASS, ROCK, JAZZ)
- RCA Line Out (2-pairs)
- 200 Watts Total Max Output Power (50w x4)
- RMS Power: 25W x 4
- Not a CD or DVD player
- For 12-volt DC Vehicle Only (12 V DC / 1 A)

CAUTION

- This unit is designed to operate on 12-volts DC, negative ground electrical system only, do not attempt to install this unit in a vehicle having a positive ground system. Please do not install the unit to a +24V truck, bus or RV, otherwise the machine will be damaged.
- You should not touch the high-polished playback head with any metallic or magnetic tools.
- Please do not replace the power fuse without professional guidance. Improper use of fuses may cause damage or fire.
- To avoid electric shock caused by short circuit, or any unnecessary damage and fire, please prevent the product from a wet environment and water.
- Metal parts of this unit (especially on the back) become quite hot during operation, to be careful to avoid touching parts other than the handle immediately after removing the unit.

Note:

1. When the machine is abnormal in operation, please tip the Reset key on the panel, the machine will resume to factory settings.
2. When the inside temperature of car is much higher or lower, please adjust the temperature in car first, then use the machine.
3. Avoid suffering strong attack, which will damage structural components of the machine.
4. Operate the unit in accordance with the instruction manual, damage caused by mal-operation is not covered under warranty.
5. Your unit has built-in filtering to eliminate most of the noise that might come through the power source. However, with some vehicles, particularly older models, some clicking or other unwanted noise might be present.

Installation

Precautions

- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where, it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.
- Be sure to remove the front panel before installation.
- If installation angle exceeds 60° from horizontal, the unit might not give its optimum performance. (A)

Step-by-Step Installation:

Please refer to the illustration and detailed step-by-step installation below:

Front installation (B)

1. Instrument board.
2. Metal mantle

After putting the mantle in the instrument board, bend the steel of the mantle making it fixed to the instrument board.

3. Fastening bolt.

Rear installation (C)

1. Instrument board
2. Nut
3. Spring washer
4. Bolt
5. Fastening bolt
6. Fixed steel

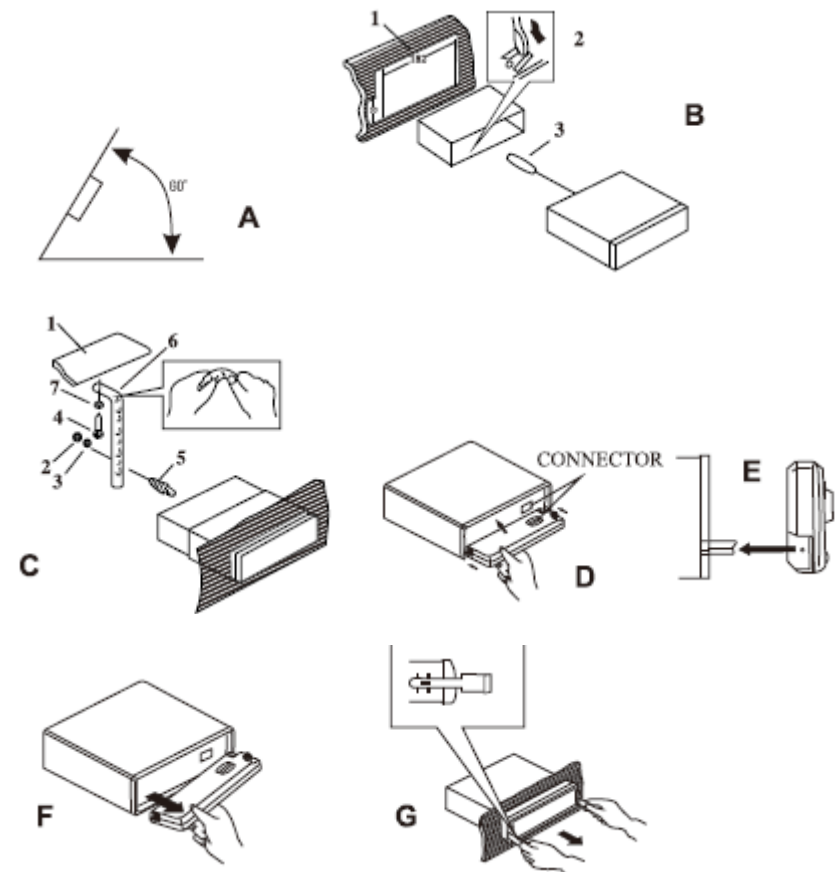
In order to improve anti-interference, please fix the steel on the car under frame. You can bend the steel if you need to.

Align the faceplate with the radio making sure the connectors line up before you push the faceplate into place. (D) (E)

Dismantling:

1. Remove faceplate and then the plastic frame. (F)
2. Insert the dismantling key into the key hole of the device. Wait until the hook lock unlocks, and then remove the key and unit. (G)

3. Disconnect all the wires of the unit as well as the antenna plug.



Note:

- ✓ Make sure that the front panel is the right way up when attaching it to the unit as it cannot be attached upside down.
- ✓ Do not press the front panel hard against the unit when attaching it. It can be easily attached by pressing it tightly against the unit.
- ✓ For safekeeping, always keep the front panel in the supplied protective case and keep it at moderate temperature.
- ✓ Do not press hard or give excessive pressure to the display window of the front panel when attaching it to the unit.

Specification:

FM

Frequency Scope..... 87.5MHz -107.9MHz

Sensitivity..... <26dB

AM

Frequency scope.....530-1710kHz

Sensitivity.....<43dB

MP3

Sensitivity..... >35dB

Frequency.....(100Hz -10KHz)+6dB

Harmonic voltage distortion (1 KHz)..... <5%

Channel Separation..... >35%

Stereophonic reproduction channel balancing.....3dB

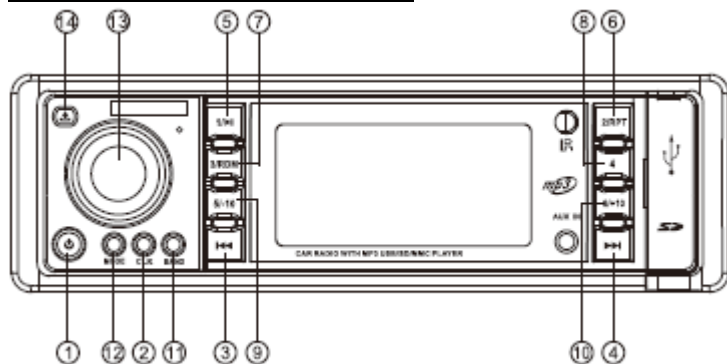
Maximum effective power.....25Wx4

Output rating.....3Wx4

Power source..... 12v (10.8-15.1V) DC negative pole earth

Speaker.....4-8Ω

Button and Key Function



- | | |
|----------|--------------------|
| 1. POWER | 8. 4 |
| 2. CLK | 9. 5/-10 |
| 3. ◀◀ | 10. 6/+10 |
| 4. ▶▶ | 11. BAND |
| 5. 1/▶ | 12. MODE |
| 6. 2/RPT | 13. VOLUME |
| 7. 3/RDM | 14. RELEASE BUTTON |

1. **POWER:** Switch on/off.

2. **CLK:** Clock button, press once then press again and hold it. Once the time starts to flash you can use the volume knob to adjust it.

3. |◀◀: In radio mode to scan automatically(press). To find a station manually(press and hold). In mp3 mode it will be the “previous song” function.

4. ▶▶|: In radio mode to scan automatically(press). To find a station manually(press and hold). In mp3 mode it will be the “next song” function.

5. 1/▶||: In radio mode this will be the preset 1 button. In mp3 mode it will be the pause function.

6. 2/RPT: In radio mode this will be the preset 2 button. In mp3 mode it will be the repeat function.

7. 3/RDM: In radio mode this will be the preset 3 button. In mp3 mode it will be the random function.

8. 4: In radio mode this will be the preset 4 button. In mp3 mode this button does not have a function.

9. 5/-10: In radio mode this will be the preset 5 button. In mp3 mode it will go back 10 songs.

10. 6/+10: In radio mode this will be the preset 6 button. In mp3 mode it will go forwards 10 songs.

11. **BAND:** Press button to switch wave band, hold button for AMS function.

12. **MODE:** Switches the mode.

13. **VOLUME CONTROL/SEL:**

(1) Turn this button to change the volume.

(2) Each press will change the mode as follows:

Volume>Bass>Treble>Balance>Fader

(3) Hold down the button until LUD is displayed. Turn it to turn the LOUD function on or off.

(4) Hold down the button until LUD shows then hold again until EQ show to change the equalizer settings. They go as follows:

CLASS/POP/ROCK/JAZZ/EQ OFF

14. **RELEASE BUTTON:** Releases detachable panel.

Electrical Connection

Many vehicles are pre-fitted with ISO connectors behind the dash, including all the electrical cabling for a car radio. In such cases, the connections fitted to the vehicle can be directly plugged into the car radio connectors. Should your car not be pre-fitted with these connectors, we strongly advise you to obtain the ISO wiring loom fitted with the male connector for connection to your car radio either from a specialist shop or from the concessionaire for your vehicle. Once obtained, you will only need to connect your loudspeakers and the power supply to the ISO connector, following connection instructions provided with same.

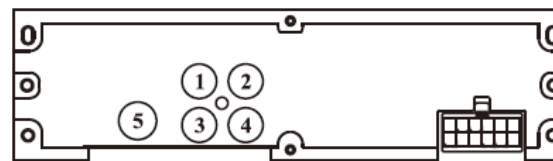
CAUTION:

- Make sure your car battery is a 12 volt (6 filler caps) negative ground system (if not, a converter will be necessary).
- Before starting wiring connections, disconnect the power supply by removing the fuse box.
- Connect the power wire to one of the extra terminals of the fuse box.
- Connect the black ground wire to a metal part of the car. It is important to make good contact.
- Make other wiring connections as shown
- Replace the fuse in the yellow power lead wire.

WARNING:

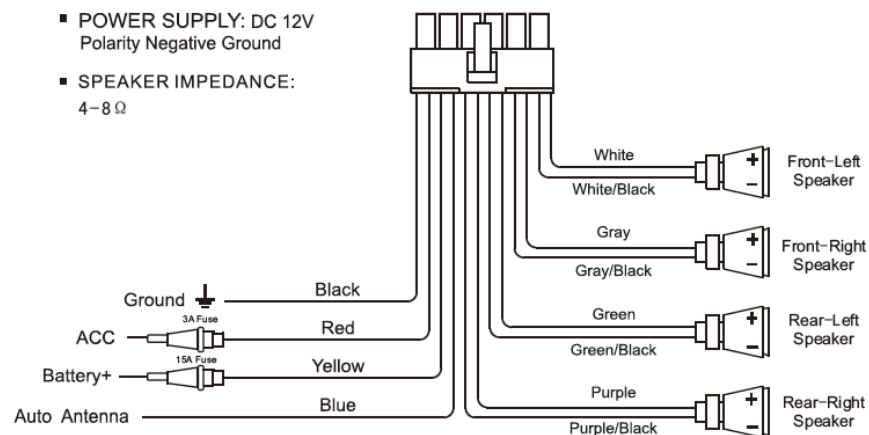
- INCORRECT WIRING OR OPERATION WILL VOID THE WARRANTY OF THIS UNIT.
- THE ISO CONNECTOR MUST NOT BE CUT.
- THE UNIT HAS 2 SEPARATE AMPLIFICATION STEPS. WHEN TWO SPEAKERS ARE CONNECTED DO NOT CONNECT TOGETHER THE WIRES BUT CHOOSE FRONT OR REAR.
- THE RED WIRE MUST BE CONNECTED BY CAR IGNITION KEY IN ORDER TO AVOID THAT CAR BATTERY BECOMES WEAK WHEN THE CAR WILL BE NOT USED FOR LONG PERIOD.

Back Panel Drawing



- ① ② Audio out(left)
- ③ ④ Audio out(right)
- ⑤ Car antenna

RUSX123 Wiring Diagram



TROUBLESHOOTING

Before going through the check list, check wiring connection, if any of the problems persist after check list had been made, consult your nearest service dealer.

Symptom	Cause	Solution
Failure of being powered on	The car ignition switch is not ON	If the power supply is properly connected to the car accessory terminal switch the ignition key to “ACC”
	The fuse is blown	Replace the fuse
No sound.	Volume is in minimum.	Adjust volume to a desired level
	Wiring is not properly connected.	Check the wiring connection
Failure of Radio	Antenna is not pulled out or connection is wrong.	Properly connect the antenna and pull it out as long as possible
	Weak signal	Rotate the antenna to proper direction
The radio station automatic selection does not work.	The signals are too weak.	Select a station manually
Failure of reading USB or SD/MSD	Poor contact	Pull out the memory card and reinsert it
Noises and sound distortion	Speaker cables are pressed by screws	Check the speaker cables
	Speaker cables are short-circuited	Properly connect wires.
Stop working	CPU can not work normally	Turn off the power and power it on again.
	Files are damaged	Skip this file and please select next file

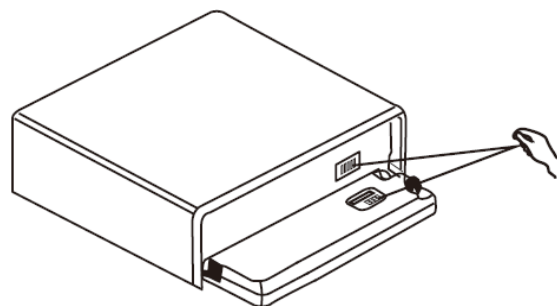
1. Change the fuse

Please make sure the amperage matches will all other fuses before changing them. If the fuse is burnt check the power supply first and then change the fuse. If the fuse is burnt again there may be internal problems, please contact the dealer.

2. Connector cleaning

If the connector of the unit and the panel is dirty the unit may not work normally. In order to prevent this please remove the front panel and clean the connectors with spirituous cotton as shown on the picture below.

CAUTION: For safety please switch off the engine and take the key out of the ignition before you clean the connector. Do not use your fingers or any metal to touch the connectors.



Note: This manual instruction is for reference. Design and specifications are subject to be changed without notice.